

REMARKS

The outstanding Action has been received and carefully noted. The above amendments and the following remarks are submitted as a full and complete response thereto.

Claims 1-11 are pending in this application. By this Amendment, claim 1 has been amended for editorial consideration. No new matter has been introduced.

Claims 1-11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Takita et al.* (US 6,151,005, hereinafter "*Takita*") in view of *Johnson* (US 5,625,373).

The present invention as recited in claim 1 from which claims 2-11 depend is directed to a data driver for outputting an analog grayscale voltage to a data bus line. Specifically, the data driver has, *inter alia*, a selector portion provided on a data bus line for selecting an analog grayscale voltage based on grayscale data, and a switching portion electrically disconnecting grayscale voltage lines from the grayscale voltage generating portion during an operation test.

Item 3, page 2 of the outstanding Action asserts that ***Takita*** teaches "a voltage selector portion (201) for selecting any one of the plurality of analogy grayscale voltages based on grayscale data (column 11, lines 63-67 through column 12, lines 1-2, Figure 2 at 201)". However, such assertion is incorrect and therefore respectfully traversed for at least the reasons stated below.

The following is described in column 12, lines 14-21 of **Takita**:

The outputs 204 and 205 are supplied to the voltage divider 206. In accordance with the outputs DG0 to DG15 of the output bus 119-0, the voltage divider 206 selects one of the divisional voltages of the 16 levels including the potential of the output 205 and generated by the group of voltage dividing resistors 207, by means of any of the selection switching elements 208. Then, the selected voltage is delivered to the output line 122-0.

It is therefore clear that the plurality of analog grayscale voltages in **Takita** are outputted by a group of voltage dividing resistors 207. Any one of the plurality of analog grayscale voltages can be selected at the group of selection switching elements 208 but not at the voltage selector portion 201. As such, **Takita** simply does not support the assertion made in the outstanding Action.

Moreover, the groups of selection switching elements 202 and 203 are located in the voltage selector 201. Therefore, the groups of selection switching elements 202 and 203 cannot electrically disconnect the grayscale voltage lines connected between the group of voltage dividing resistors 207 and the group of selection switching elements 208 from the group of voltage dividing resistors 207. Accordingly, **Takita** also lacks any teaching or suggestion regarding a switching portion electrically disconnecting grayscale voltage lines from a grayscale voltage generating portion as required and set forth in claim 1.

As to **Johnson**, it simply fails to compensate for the above discussed deficiencies in **Takita**. Additionally, since the groups of selection switching elements 202 and 203 in **Takita** are for delivering high and low potentials on an output bus and are not for the use in an operation test, a skilled artisan would not have combined

Johnson with **Takita**, and such combination of **Takita** and **Johnson** would not have lead to the present invention as set forth in claim 1.

Referring to claims 2-11, which depend from claim 1, they are allowable for at least the reasons stated above with respect to claim 1.

In view of the foregoing, allowance of claims 1-11 and the prompt issuance of a Notice of Allowability are respectfully requested. However, should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event this paper is not considered to be timely filed, Applicants hereby petition for an appropriate extension of time. The fee for this extension may be charged to our Deposit Account No. 01-2300. The Commissioner is hereby authorized to charge any fee deficiency or credit any overpayment associated with this communication to Deposit Account No. 01-2300.

Respectfully submitted,

Arent Fox Kintner Plotkin & Kahn, PLLC



Raymond J. Ho
Attorney for Applicants
Registration No. 41,838

Customer No. **004372**
1050 Connecticut Avenue, N.W., Suite 400
Washington, D.C. 20036-5339
Tel: (202) 857-6000
Fax: (202) 638-4810
RJH/klf (#159295v1)
Enclosures: Marked-Up Copy of Claim Amendments

MARKED-UP COPY OF AMENDED CLAIMS

1. (Amended) A data driver outputting a plurality of analog grayscale voltages to a plurality of data bus lines, comprising:

a grayscale voltage generating portion generating the plurality of analog grayscale voltages for a predetermined number of grayscales;

a selector portion provided for each of the data bus lines and selecting any one of the plurality of analog grayscale voltages based on grayscale data;

a plurality of grayscale voltage lines connected to the grayscale voltage generating portion and provided for each of the plurality of analog grayscale voltages and supplying the analog grayscale voltages to the selector portion; and

a switching portion electrically disconnecting the grayscale voltage lines from the grayscale voltage generating portion during an operation test.